ABSTRACT OF THE DISCLOSURE

A particle separator includes a vortex chamber receiving feed slurry via a feed inlet. The feed inlet is positioned relative to the vortex chamber to effect rotation of the feed slurry upon entry in the vortex chamber and to generate a fluid vortex. The vortex chamber includes a conical section beneath the feed inlet, wherein the conical section terminates at an apex. A bulb housing is coupled with the vortex chamber and includes a vortex destroyer disposed adjacent the conical section apex. The vortex destroyer serves to contain the fluid vortex to the vortex chamber. A settling chamber is defined by the bulb housing beneath the vortex destroyer for collecting solid particles.